From: Washington, John [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=FDC3E8CE9F1D45C4894881FF420CA104-WASHINGTON, JOHN]

**Sent**: 9/10/2018 8:10:03 PM

To: Pilant, Drew [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=c9669a68dabb4704bdd7c2eb85f998b2-Pilant, Drew]

**Subject**: RE: Spatial data for PFAS samples?

Actually, you just reminded me I am supposed to listen in on the New Hampshire meeting tomorrow and report out on data. How about Wednesday after 11 AM, in the AM or PM, your choice?

My ask for you: I need to prepare maps for Tim Buckley, J OZ and Region 2 using these data. Region 2 is Sep 25, J OZ before that, and Buckley before J OZ. Can I get you to help me? If not, I probably can get a graphics contractor.



## Agenda EPA, Office of Research and Development Visit



September 11 & 12, 2018 NHDES Offices, 29 Hazen Drive, Concord, NH

## Ex. 5 Deliberative Process (DP)

From: Pilant, Drew

Sent: Monday, September 10, 2018 4:03 PM

To: Washington, John < Washington. John@epa.gov>

Subject: RE: Spatial data for PFAS samples?

Arg! Sorry- I got swept up into some admin deadlines- are you available tomorrow?

From: Washington, John

**Sent:** Monday, September 10, 2018 3:56 PM **To:** Pilant, Drew < <u>Pilant.Drew@epa.gov</u>> **Subject:** RE: Spatial data for PFAS samples?

Did you want to talk Drew? Today or tomorrow? Just a reminder.

From: Washington, John

Sent: Monday, September 10, 2018 12:26 PM

To: Pilant, Drew < Pilant. Drew@epa.gov>; Lindstrom, Andrew < Lindstrom. Andrew@epa.gov>

Subject: RE: Spatial data for PFAS samples?

Hey Drew,

Attached are the legacy PFAS compounds in soils.

I plan to send estimates of novel PFASs in soil and plants later today.

I have a lot of work to do still on the legacy PFASs in plants – these won't be coming your way for some time into the future.

I look forward to our talk this PM.

Thanks, John

From: Pilant, Drew

Sent: Monday, September 10, 2018 11:18 AM

To: Washington, John < Washington. John@epa.gov >; Lindstrom, Andrew < Lindstrom. Andrew@epa.gov >

Subject: RE: Spatial data for PFAS samples?

Thanks, John.

I have a meeting 11:30, but will be around this afternoon.

Then go home and get kayak ready!

Drew

From: Washington, John

Sent: Monday, September 10, 2018 9:23 AM

To: Pilant, Drew < Pilant. Drew@epa.gov >; Lindstrom, Andrew < Lindstrom. Andrew@epa.gov >

**Subject:** RE: Spatial data for PFAS samples?

Looks great Drew.

I have a meeting at 10 AM on Level I QA data clearance of the NJ data I plan/hope to send you. Let me get ready for and thru that, and I will plan to give you a call during the 11 AM hour if that is ok with you (hoping that the QA review does not have a need to extend beyond that).

Man, this hurricane Flo sounds scary. Hope you guys are buttoned down and come out ok!

John

From: Pilant, Drew

Sent: Friday, September 7, 2018 11:15 AM

To: Washington, John <Washington.John@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>

Subject: Re: Spatial data for PFAS samples?

Sounds good, John.

Here's a quick and dirty map I made yesterday. Soon I can migrate this to the GeoPlatform and you guys can interact with it directly, zoom, change layers, etc.

Yellow is Tidal Surf Water Sediment locations, with specific conductivity plotted, circle size proportional to micromohs. Cyan circles are locations only (no properties or attributes shown) of Soils Veg spreadsheet.

## Ex. 5 Deliberative Process (DP)

The colors around Philadelphia are 1 m pixel high resolution land cover from EnviroAtlas. We happened to have mapped Philly and have about 100 derived ecosystem service and sustainability metrics in map form.

Anyway, just some eye candy to get the neurons a sparkin' -

Drew

From: Washington, John

Sent: Friday, September 7, 2018 10:29 AM

To: Lindstrom, Andrew

Cc: Pilant, Drew

Subject: RE: Spatial data for PFAS samples?

Hey Drew,

I am officially past done for the week. I tried calling you a bit ago. How about if I call you on Monday.

Have a great weekend guys.

John

From: Lindstrom, Andrew

Sent: Friday, September 7, 2018 9:15 AM

To: Washington, John < Washington. John@epa.gov >

**Cc:** Pilant, Drew < Pilant.Drew@epa.gov > **Subject:** RE: Spatial data for PFAS samples?

John,

I don't think there is any harm in trying to visualize the preliminary data – as long as we keep in mind that it eventually needs to go through the full QA process.

There's always little dinks to the data that help sharpen the final analysis, but it is often very helpful to just plot the preliminary information to help start thinking about it.

I'm hoping there will be lots of dialog between the different folks on this project so making changes and ongoing suggestions should be part of that.

Thank you very much,

Andy

From: Washington, John

Sent: Thursday, September 6, 2018 11:00 AM

To: Lindstrom, Andrew < Lindstrom. Andrew@epa.gov>

**Cc:** Pilant, Drew < <u>Pilant.Drew@epa.gov</u>> **Subject:** RE: Spatial data for PFAS samples?

Drew,

Were you after only the lat-long data for NJ at this point, or did you also want chemical data?

## Ex. 5 Deliberative Process (DP)

So do you want me to send QA-approved PFAS data yet, or do you prefer waiting for management to clear the data?

Thanks, John

From: Lindstrom, Andrew

Sent: Thursday, September 6, 2018 10:31 AM

To: Washington, John < Washington. John@epa.gov >

**Cc:** Pilant, Drew < <u>Pilant.Drew@epa.gov</u>> **Subject:** RE: Spatial data for PFAS samples?

John,

I think it is a great idea to try to start working on this project to help summarize the data that have already been produced as part of the NJ DEP collaboration.

Our briefing to R2 and the Program Offices on September 25<sup>th</sup> could benefit from anything that you may come up with.

Thank you very much,

Andy

From: Washington, John

**Sent:** Thursday, September 6, 2018 9:48 AM **To:** Pilant, Drew <Pilant.Drew@epa.gov>

Cc: Lindstrom, Andrew < Lindstrom. Andrew@epa.gov>

Subject: RE: Spatial data for PFAS samples?

Drew,

I am attaching a spreadsheet of lat/long that I have worked off of. In it I noticed that samples 1 and 10 are indicated as the same location. I have received an email from NJ correcting this. I plan to try to find it for you. The S and C in column L is NJ's thoughts on the possible relevancy of the sample primarily to Solvay or Chemours, two facilities that produce PFASs.

From: Pilant, Drew

Sent: Tuesday, September 4, 2018 3:59 PM

To: Washington, John < Washington. John@epa.gov >; Lindstrom, Andrew < Lindstrom. Andrew@epa.gov >

Subject: RE: Spatial data for PFAS samples?

Hi John,

Thanks for the papers and comments. The papers are good for my knowledge, but not so much so from a mapping standpoint. If necessary, we could plot these sample locations using their lat/long.

In general, we are looking for precise measurements of lat/long (within a few meters accuracy).

Onward! Drew

From: Washington, John

Sent: Tuesday, September 04, 2018 1:12 PM

To: Pilant, Drew <Pilant.Drew@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>

Subject: Re: Spatial data for PFAS samples?

Hi Drew,

Here is something easy for me to find, but I am unsure if it helps your effort. We wrote a paper on PFASs in soils from around US and the world that were not associated with any obvious contamination. We found one or more PFASs in every sample, including Antarctica.

The SI has the PFAS data as well as lat/long for every sample. Does this help your effort??

I also have old papers on PFASs in ag soils and plants that received biosolids sludge applications in Alabama. (Andy and Mark have water samples from these sites as well.) And I have an old paper on PFASs river water and sediment samples, in Georgia, mostly from sewage treatment discharge. These Alabama and Georgia studies have sample maps, but not lat/long if I remember correctly. Would any of these papers help? Let me know if yes.

John

Sent: Friday, August 31, 2018 9:38:39 AM To: Washington, John Subject: Spatial data for PFAS samples? Hi John! Hope you are well, and out of the office today on some amazing long weekend vacation. I'm working on the geospatial mapping portion of shark tank PFAS. I hear you have some soil sample data around a known PFAS source (or something like that). Do you have any data/information I can begin to organize? Shapefiles or spread sheets with lat/lon? We are hiring an ORISE fellow to do this work, but I thought I'd get started organizing. Ttyl, Drew Andrew Pilant Environmental Imaging and Geospatial Research Sensing and Spatial Applications Branch US EPA/ORD/NERL/EMMD RTP, NC 27711 Desk: 919-541-0648\*\*

From: Pilant, Drew